Andatech® AL3500F

Fuel Cell Wallmounted Breathalyser

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SAI GLOBAL

User's Manual

The vending machine type AL3500F is used in restaurants to prevent alcohol related traffic accidents by customers.

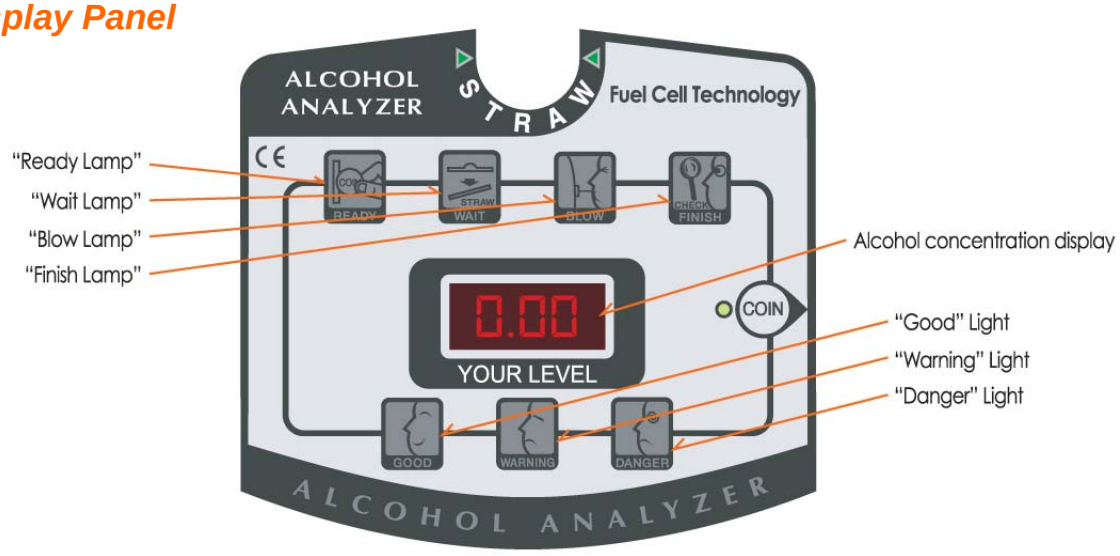
The analysis process will be guided through and results will be given in spoken words as well as displayed.

And the lamp will be lit to show warning depending on the result, making this device easier and more convenient to use.

Components

*Bulls eye: This is where the customer places the straw to blow into the machine. The sampling time is 3 seconds.
*Coin Slot: Located on the right side of the machine, it accepts only the coin denomination specified. Others are returned.
*Straw outlet: This is where the straws emerge from the machine. The straws should be used to perform the test.

Display Panel



How to use

1. Insert the coin into the slot.You will hear the following voice: "Thank you. Please take a straw from the tray and wait until the machine counts down to "0" in the display."

2. After taking a straw from the outlet, blow into the straw when you hear following message: "Insert the straw securely into the "bulls eye" and blow steadily until the sound concludes". If you blow for more than four seconds, then the following message will be heard and the test will be finished. "Three, two, one, ding-dong. Sampling is completed." If you stop blowing or you do not breathe strongly enough, the following message will be heard: "The device does not sense a proper breath sample, please wait and try again" and the machine will return to the waiting mode. This process will continue until you finally obtain a correct result.

3. When the measurement is complete, the blood alcohol concentration will appear on the display window. Then the voice guide will indicate whether or not you can drive, aided by lamplights.The voice message for each level is;
    a. **Good** "The device detects very little or no alcohol. However, if you have consumed ANY amount of alcohol, it may not be safe to drive."
    b. **Warning** "The device detects a moderate level of alcohol. Please wait at least an hour or more and perform another test. It may not be safe to drive."
    c. **Danger** "The device detects a high level of alcohol. It is NOT safe to drive."
4. If you do not blow into the straw, you will see a 10-second timer appear on the display. You must complete your breath test before the timer runs out. The coin will not be refunded. Please test within 10 seconds after machine performs the count down to "O".

Precautions

1. During testing, any alcohol traces left in your mouth will increase the value of the blood alcohol concentration level. Remove these traces before testing. Highest accuracy is achieved 30 minutes after drinking.
2. When you exhale through the straw, some unintentional salivation may affect the built-in equipment. However, please be aware that placing any other liquids or materials into the straw may cause the sensor to malfunction.
3. Cigarette smoking may also increase the blood alcohol concentration value. Allow one minute after smoking before testing.

Specifications

Indication of B.A.C	0.00 to 0.40 %BAC
Warm up time	within 30 seconds
Response time	within 10 seconds at 0.10 %BAC
Sensor	Fuel Cell Sensor
Accuracy	±0.005 %BAC at 0.100 %BAC
Ambient conditions	Operation : 5 to 40 ℃ Storage : 5 to 50 ℃
Display	2 digit LED
Result reading	Good: Less than 0.02%BAC(0.00~0.20‰ or 0.00~0.10mg/l) Warning: 0.02~0.05%BAC(0.20~0.50‰ or 0.10~0.20mg/l) Danger: More than 0.05% BAC(0.50‰ or 0.25mg/l)
Power supply	AC 110~220, 50/60 HZ, 0.5A input DC 12V, 1.5A output
Mouth piece	Cylindrical straw
Coin Mechanism	Specify denomination of single coin
Weight	5.84 kg
Dimensions(mm)	350*500*200
Remark	Optional wall mounted bracket

Setting Guide for Buzzer, Sound on/off and Low/High Level

1. To enter the set up mode
   Open the machine and you will see three buttons on the left side of the electric circuit board. Press two buttons labeled “set1” and “set2” at the same time, hold them down for more than two seconds and then release them.
   This changes the status into the set up mode. To go back to the previous mode, repeat the above procedure. The set up mode allows you to work the machine’s maintenance.
   It is possible to change functions only by pressing these buttons.
2. “bu2” (buzzer)
   You can turn the buzzer sound on or off by using ‘On’ or ‘Off’.
3. “Snd” (sound)
   You can select whether or not the voice guide service is automatically performed by selecting ‘On’ or ‘Off’.
4. “Lo” (pass level)
   Being below this level means that you may drive. The default number is set to “L.02” in case of the %BAC unit
5. “Hi” (danger level)
   Being above the level entails you are over the legal limit permitted, and that you must not drive. The default number is set to “H.05” in case of the %BAC unit

*Please refer to the guide on the electric circuit board!

Maintenance

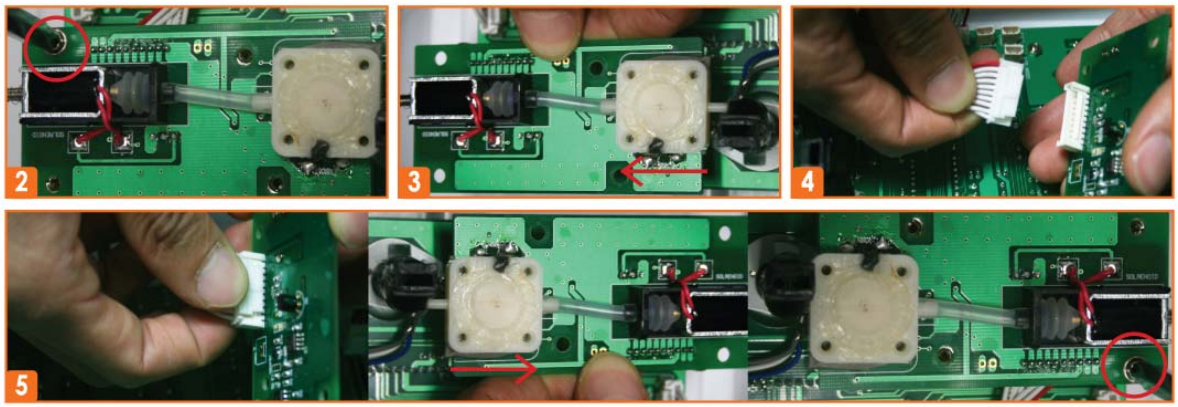
The software product is easy to maintain, and its operating environment can be changed without any special skills. It automatically checks and adjusts the accuracy rate of measurement.

1. If you want to check the total amount of tests, press SET 1 and the display window will show the test.
   Press SET 1 during 2 seconds and the count will be reset to 0, automatically returning to normal operation mode.
   Wait a few seconds after testing.
2. When you adjust the number of coins for each test, press SET 2 during 2 seconds.
   The display window will show “CO”, then press SET 2 again. It will allow from 1 to 10 coins per test.
   If number 2 is entered, that means two coins are required. The default number was set to 1.

Replacing sensors

If you have trouble with the sensors, you should only replace them with those provided by the manufacturer.

Please refer to the following for replacement issues:

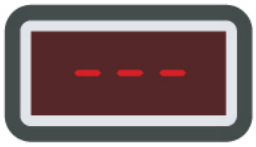


1. **Turn the power off. (Very Important!!)**
2. Open the rear door of AL3500F and unscrew
3. Pull out the sensor board above the arrow direction.
4. Plug out the connector and exchange the new sensor board
5. Plug in connector, push the sensor board and turn 4 screws tightly.
6. Turn on the power and then perform the accuracy adjustment.
7. The replacement concludes.

Warning Display

1. Check if the alcohol sensor is in the right place on the board.
2. If you still have the error message, replace the sensor.

Coin slot error
If an inadequate coin is inserted and caught in the slot, you will see Er3.
Push the button below the coin slot or check the coin slot form inside.



If you do not blow into the straw, you will see a 10-second timer appear on the display.
You must complete your breath test before the timer runs.
But if you do not blow again within 10 sec, you can see this message. The coin will not be refunded.

Trouble shooting

1. The machine is lugged in, but there is no power.
   a. The power of the product was set at 110V (or 220V) by default. You need to make sure the voltage is collect.
   b. Make sure that the line attached to the power adapter is connected correctly to the power socket on the bottom of the machine.
2. You inserted a coin, but the machine does not work.
   a. Make sure you use the proper coin. The machine only accepts the specified kind and others are returned.
   b. Select 'Co' using the SET 2 button, and then make sure the number set on the display window is correct. As explained above, the machine will work only if you use this number of coins.
3. There is no voice guide or buzzer sound.
   The option for voice guide and buzzer sound can be selected. In the set up mode, check the status of the set up as explained above.
4. You blow, but the machine does not respond.
   Check if the display window shows “bEr”.
   If it does, the machine may have a problem. You need to take the action corresponding to the error number as previously explained.
5. After testing, the machine does not go back to the waiting mode.
   The machine displays the result value for about 10 seconds. In order to go back to the measuring mode, the alcohol blown into the machine must be eliminated completely.
   The amount of alcohol increases the time required for this elimination to be competed, but it normally does not exceed a minute. If it takes more than one minute, the sensor may be malfunctioning.
   You should contact customer services in this case.

Warranty

The manufacturer warrants the product to be free from defects in workmanship or material (excluding calibration) under normal use for six (6) months from the date of purchase.
The manufacturer's obligation under this warranty is limited to replacing, adjusting or repairing the unit if returned along with proof of purchase. This warranty is void if the unit has been tampered with or maliciously damaged.

Recalibration & Service

For recalibration and technical support, please contact us at:

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